From: Bussard, David [Bussard.David@epa.gov]

Sent: 10/26/2017 3:21:13 PM

To: Keshava, Nagalakshmi [Keshava.Nagu@epa.gov]; Kraft, Andrew [Kraft.Andrew@epa.gov]

CC: Glenn, Barbara [Glenn.Barbara@epa.gov]; Ramasamy, Santhini [Ramasamy.Santhini@epa.gov]; D'Amico, Louis

[DAmico.Louis@epa.gov]

Subject: RE: A few more details re formaldehyde conference discussion on caffeine

Ex. 5 - Deliberative Process

David

From: Keshava, Nagalakshmi

Sent: Thursday, October 26, 2017 7:49 AM

To: Bussard, David <Bussard.David@epa.gov>; Kraft, Andrew <Kraft.Andrew@epa.gov>

Cc: Glenn, Barbara <Glenn.Barbara@epa.gov>; Ramasamy, Santhini <Ramasamy.Santhini@epa.gov>; D'Amico,

Louis <DAmico.Louis@epa.gov>

Subject: RE: A few more details re formaldehyde conference discussion on caffeine

Thanks David.

Iris information helpful.

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

From: Bussard, David

Sent: Wednesday, October 25, 2017 5:48 PM **To:** Kraft, Andrew < <u>Kraft.Andrew@epa.gov</u>>

Cc: Keshava, Nagalakshmi < Keshava. Nagu@epa.gov>; Glenn, Barbara < Glenn. Barbara@epa.gov>; Ramasamy,

Santhini <<u>Ramasamy.Santhini@epa.gov</u>>; D'Amico, Louis <<u>DAmico.Louis@epa.gov</u>> **Subject:** Re: A few more details re formaldehyde conference discussion on caffeine

Ex. 5 - Deliberative Process

David Bussard

On Oct 25, 2017, at 4:31 PM, Kraft, Andrew < Kraft. Andrew @epa.gov > wrote:

Ex. 5 - Deliberative Process

From: Bussard, David

Sent: Wednesday, October 25, 2017 4:08 PM

To: Keshava, Nagalakshmi; Kraft, Andrew; Glenn, Barbara; Ramasamy, Santhini **Subject:** A few more details re formaldehyde conference discussion on caffeine

David Bussard

Begin forwarded message:

From: "Camacho, Iris" < Camacho.Iris@epa.gov > Date: October 25, 2017 at 2:47:46 PM EDT

To: "Bussard, David" < Bussard.David@epa.gov >

Subject: RE: by any chance, do you have notes on formaldehyde

conference discussion on caffeine?

David,

J. Bus mentioned that caffeine undergoes demethylation to formaldehyde. He also mentioned that 400 mg dose of caffeine (on a daily basis) releases ~2 mmoles of formaldehyde. No reference was provided about this information.

He and others were making the point how data from chemicals systemically metabolized into formaldehyde might inform the MoA for leukemia. He also mentioned methyl chloride.

Iris A. Camacho, Ph.D.

Senior Science Advisor (on detail)

Office of Pollution Prevention and Toxics

U.S. Environmental Protection Agency

William Jefferson Clinton Building East, 6308-A

Washington, DC 20460

Phone: 202-564-1229

Work hours: 8:00 am - 4:30 pm

Work cell phone: Ex. 6 - Personal Privacy

Telework phone: Ex. 6 - Personal Privacy

Email: camacho.iris@epa.gov

From: Bussard, David

Sent: Tuesday, October 24, 2017 12:17 PM **To:** Camacho, Iris < Camacho.Iris@epa.gov>

Subject: Re: by any chance, do you have notes on formaldehyde

conference discussion on caffeine?

Thx. I know times are busy!

David Bussard

On Oct 24, 2017, at 11:54 AM, Camacho, Iris < Camacho.Iris@epa.gov> wrote:

David,

I will check my notes and get back to you tomorrow. It may be earlier but no promises.

-Iris Camacho

From: Bussard, David

Sent: Tuesday, October 24, 2017 11:23 AM **To:** Camacho, Iris < <u>Camacho.Iris@epa.gov</u>> **Subject:** by any chance, do you have notes on formaldehyde conference discussion on caffeine?

Iris,

Kris said she'd stepped out during the discussion of caffeine. By any chance do you have notes that would share insight as to what the argument is? It is not one I recall anyone making to NCEA in the past with respect to caffeine. But, we are just trying to anticipate issues that could arise. We'll look for what we can find in the open literature re metabolism of caffeine (the first step is a demethylation and there is work showing labeled caffeine results in labeled CO2 in exhaled breath), but are not sure what the argument made was.

I know you are busy. But, if you have a chance and have any insights, that would be useful.

David Bussard